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T S5/3,KWIC/1-14

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5/3,KWIC/1 (Item 1 from file: 95)

DIALOG(R)File 95:TEME-Technology & Management

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A 01924305 20041201499

Formulating fluids with improved friction durability for we
(Schmierstoffe mit erhoehter Reibungsfestigkeit fuer Anfahr-
Watts, Raymond; Castle, Rebecca; Gorda, Keith; Nibert, Roger
Infineum, Linden, US

Getriebe in Fahrzeugen 2004, VDI-Ges. Entwicklung Konstrukti
Friedrichshafen, DE, 22.-23. Jun, 2004VDI-Berichte, v1827, n
2004

Document type: Book chapter; 06 Conference paper Language:

Record type: Abstract

ISBN: 3-18-091827-6

ISSN: 0083-5560

2004

ABSTRACT:

...speeds. In response to the need for a test to assess fric
requirements of torque converters with regulated clutches
authors have developed a test method using a modified SAE2 m
cycle was developed in which the clutch is slipped under
conditions for 50 minutes. A program was begun to develop a

...DESCRIPTORS: DURABLENESS; MECHANICAL TORQUE CONVERTERS;
; GEAR LUBOIL; ESTATE CARS; FRICTION CLUTCHES; FRICTION; FRI
; LUBRICANTS

A+ 5/3,KWIC/2 (Item 2 from file: 95)

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01859710 20040401841

INFLUENCE OF ATF friction properties on shudder in slipping t
clutches

(Einfluss der Reibungseigenschaften des Fluids von Automatik
des Zittern in Schlupf-Drehmomentwandlerkupplungen)

Cameron, T; Tersigni, S; McCombs, T; Jao, TC

Virginia Commonwealth Univ., Richmond, USA; Ethyl Petroleum

<http://www.dialogclassic.com/main.vmgw>

10/22/2006

Richmond, USA

Tribology and Lubrication Engineering, 14. Internat. Colloqu
Vol. 1, Ostfildern, DE, Jan 13-15, 20042004

Document type: Conference paper Language: English

Record type: Abstract

ISBN: 3-924813-54-X

**Effects of ATF friction properties on snagger in slipping
converter clutches**

2004

ABSTRACT:

Slip-controlled torque converter clutches (TCC) were int
automatic transmissions in the 1980's to improve fuel econom

5/3,KWIC/3 (Item 3 from file: 95)

DIALOG(R)File 95:TEMP Technology, & Management

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01859709 20040401842

A* **Impact of lubricant formulation on the friction properties
clutch plates**

(Einfluss der Schmierstoffformulierung auf die Reibungseigens
Carbonfaser-Kupplungsdruckplatten)

Castle, RC; Watts, RF

Infineum USA, Linden, USA

Tribology and Lubrication Engineering, 14. Internat. Colloqu
Vol. 1, Ostfildern, DE, Jan 13-15, 20042004

Document type: Conference paper Language: English

Record type: Abstract

ISBN: 3-924813-54-X

2004

ABSTRACT:

...friction materials have been employed by transmission bui
variety of applications, including torque converter clutc
synchronizers, limited slip devices and shifting clutches.
generation of materials gives improved durability relative

5/3,KWIC/4 (Item 4 from file: 95)

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01841495 20040300975

Stress analysis of a new disk-type variable torque slipping skewed rollers

(Analyse der mechanischen Spannung einer neuen, scheibenfoer Rutschkupplung mit veränderlichem Drehmoment und schräg an Rollen)

Feng, M; Ono, K; Mimura, K

Tokyo Inst. of Technol., J; MIM Engng. Comp., Yokohama, J

JSME International Journal, Series C (Mechanical Systems, Ma and Manufacturing), v46, n4, pp1509-1522, 2003

Document type: journal article Language: English

Record type: Abstract

ISSN: 1344-7653

ABSTRACT:

...in order to show the feasibility of this design idea and theoretical torque capacity.

5/3,KWIC/5 (Item 5 from file: 95)

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01813111 20031106357

Mixed EHL analysis of the variable torque slipping clutch w rollers

(Analyse der Misch-EHD-Schmierung von Schlupfkupplungen mit Drehmoment und mit schrägen Rollen)

Feng, M; Ono, K; Mimura, K

Tokyo Inst. of Technol., J; MIM Engng. Comp., Yokohama, J

Transactions of the ASME, Journal of Tribology, v125, n4, pp

Document type: journal article Language: English

Record type: Abstract

ISSN: 0742-4787

Mixed EHL analysis of the variable torque slipping clutch rollers

2003

ABSTRACT:

<http://www.dialogclassic.com/main.vmgw>

10/22/2006

In this paper, a mixed elastohydrodynamic lubrication (EHL) presented for the variable torque slipping clutch with rollers. It is characterized by a finite spatial curve contact dimensional...

...the GT contact pressure-compliance relationship under the condition of the elements of the slipping clutch. The hydrodynamic contact pressure is calculated and the intermutual influences...

...of pressures are shown. In addition, the influences of the speed on the contact pressure are investigated both theoretically and experimentally. Concurring agreements are found between the experimental...

5/3,KWIC/6 (Item 6 from file: 95)

DTALOG(R)File 95:TEMP 10000000, 10000000

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01806556 20031101552

Controlling the Solar Cells of the Space Center by means of a magnetic-clutch torque sensor
(Magnetische Kupplung mit Drehmomentensensor zur Regelung der Solarzellen im russischen Teil der Internationalen Raumstation Belenkii, AD

All Russian Sci.-Res. Inst. of Electrical Mach., RU
Russian Electrical Engineering, v73, n5, pp9-14, 2002

Document type: journal article Language: English

Indexed topic: Abstract

ISSN: 1068-3712

...drives in the Russian segment of the International Space

2002

ABSTRACT:

The International Space Station (ISS) is investigated. A control based on the torque sensor of the limiting magnetic drive is proposed. The sensor must measure the magnetic-clutch torque. The clutch angle of rotational angles from 0 degree to 36 degrees. Optimizing the...

...within the kinematic chain of the gear system, which crea

working conditions for the torque sensor. Operation condition combination with the requirements on the reliability (not less than 15 years), entails the use of the Hall Effect in the sensor. The sensor consists of two identical modules, each with a stator. The...

...the solar cell is minimal. The optimum corresponds to driving the solar cell at a constant voltage. The amplification factor of the feedback must be different when the system is tracking...

5/5, 2006/7 (Item 7 from file: 95)

01644973 20020509457 FIZ TECHNIK Technology & Management

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01644973 20020509457

Robust control of torque converter clutch slip system
passenger vehicles using advanced torque estimation algorithm

Hahn Jin-On; Lee Kyo-Il

School of Mech. & Aerospace Engng., Seoul Nat. Univ., ROW

Vehicle System Dynamics, v37, n3, pp175-192, 2002

Document type: journal article Language: English

Record type: Abstract

ISSN: 0042-3114

Nonlinear robust control of torque converter clutch slip
estimation algorithm
2002

ABSTRACT:

In this paper, a torque-estimation-based robust controller for car torque converter clutch slip system is presented. The robust controller uses only the measurements available from sensors that are installed in current passenger vehicles for estimation and feedback control. A conventional full state observer with a neural network-based

observer is designed to estimate the unknown driving load torque. A torque estimator considering the torque converter is developed for improved torque estimation accuracy. The stability of the internal states is guaranteed, and the performance and

DESCRIPTORS: CLUTCH ; TORQUE CONVERTERS ; ROBUST CONTROL;

CONTROL; ARTIFICIAL NEURAL NETWORKS; ESTIMATION; TORQUE

COMPUTERIZED SIMULATION; PASSENGER CARS

5/3, RWIC/8 (Item 8 from file: 95)

DIALOG(R) File: 95-TEMP Technology & Management

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01575508 20020107020

Automated welding of extruded profiles and sheets of aluminum
car bodies

Schulze, V; Loche, D; Gerber, A

Chinese-German Ultralight Symposium, Beijing, China, 19 - 20

DVS-Berichte, v218, n11, pp89-99, 2001

Document type: journal article; 26 Charts

Record type: Abstract

ISBN: 3-87155-676-9

ISSN: 0418-0639

Automated welding of extruded profiles and sheets of aluminum
car bodies

2001

ABSTRACT:

Die vorliegende Arbeit konzentriert sich auf den Einfluss
Herstellungssequenz und Parameter der automatisierten Schwei-
den Ermüdungswiderstand und dem Zerstörungsverhalten von L-
Schweißverbindungen von...

...Herstellung der Probeexemplare wurde die Strangpressprofil
Aluminiumlegierung AlMgSi0,5 verwendet. Die Profil-
Aussenabmessungen h=100 mm und w=50 mm aber mit unterschied
Eckradien waren verfügbar. vor...

...die Spaltbreite gegeben. Wie sich der örtliche Einfluss
der in der Verbindungsgeometrie erkannt wurde, der-
zeitig nicht exakt beschrieben werden. Der globale Bruchf
verbindung Strangpressprofil-Strangpressprofil ist durch de
Wahl der Eckradien, die die Eckengebiet der Schweißung die Posi
maximalen Energiefluss präsentiert, gegeben. Weil dieser
typisch für die Gestaltung und nicht vermeintbar ist, ko
örtliche Ausbildung der Ecke durch maximale Penetration der
und Verhinderung von Kratern im Eckenbereich optimiert w
Optimierung wird durch die Einstellung der Strangprofilne
Schweissequenz des ausgewählten MIG-Schweißprozesses mit

5/3,KWIC/9 (Item 9 from file: 95)

DIALOG(R)File 05-TEME Technology & Management

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01535380 20010706382

Development of high durability friction materials

Inagami, K; Kamada, Y; Shibuya, T

Dynax, Hokkaido, J

Tribology of Vehicle Transmissions, the 2001 Internat Symp

Toyota, J, Feb 7-9, 20012001

Document type: Conference paper Language: English

Record type: Abstract

2001

ABSTRACT:

...Slip Differential) of agricultural machines. These new ty materials are adequate for continuous slipping torque co clutches, clutches and brakes for off-highway vehicles wh durability under high pressure applications

5/3,KWIC/9 (Item 10 from file: 95)

DIALOG(R)File 05-TEME Technology & Management

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00985950 M96056427562

...Application of H (exp infinity) control design to slip cont torque converter clutch

(Die Anwendung der H (exp unendlich) Regelungsauslegung an c ... die Anwendung eines hydrodynamischen

Osawa, M; Hibino, R; Yamada, M; Kono, K; Kobiki, Y

Toyota Aichi, J

Advances in Automotive Control. IFAC Workshop, Ascona, CH, M

1995

Document type: Conference paper Language: English

Record type: Abstract

ISBN: 0-08-042589-5

Application of H (exp infinity) control design to slip cont
torque converter clutch

<http://www.dialogclassic.com/main.vmw>

10/27/2004

1995

ABSTRACT:

This paper describes the development of a robust feedback on the torque converter clutch slip control system mounted on a 41E automatic transaxle. H (exp infinity) control theory w

5/3,KWIC/11 (Item 11 from file: 95)

DIALOG(R) File 95-TEMP Technology & Management

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A

00856627 M94121001667

Marktluebersicht Anz. 7 11

(Market review. Starting couplings)

anonym

Antriebstechnik, v33, oMarktluebersicht 1995, pp168-169, 1994

Document type: journal article Language: German

Record type: Abstract

ISSN: 0722-8546

1994

DESCRIPTORS: STARTING CLUTCHES; CENTRIFUGAL CLUTCHES ; OVER CLUTCHES ; TORQUE ; SLIP --

5/3,KWIC/12 (Item 12 from file: 95)

DIALOG(R) File 95-TEMP Technology & Management

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00784483 M94064136568

Material for continuous slip torque converter appl
anti-shudder considerations(Reibbelag fuer kontinuierlich wirkende Schlupfdrehmomentenw
anfangsbeschleunigungen)

Lem, RC; Yih-Fong Chen

Boig Warner Automotive

SAE Papers, v1, n1, pp1-11, 1994

Document type: Conference paper Language: English

Record type: Abstract

ISSN: 0148-7191

1994

The basic friction material design considerations for contin-
torque converter clutches are discussed. A bench test met
developed to predict the performance of continuous slip at
different temperatures, pressures, and velocities. A test me-
analyze a full-sized friction plate was also designed. Two t-
clutches: a 'initial shudder' and 'shudder'. These shudder phenomena were investigated. The res-
that...

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ISSN: 0722-8546

DESCRIPTORS: STARTING CLUTCHES; CENTRIFUGAL CLUTCHES ; OVER
CLUTCHES ; TORQUE ; SLIP --

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10 15 20 25
30 35 40 45

ISSN: 0148-7191

1991

ABSTRACT:

Shift quality in automatic transmission is greatly affected deterioration and variation of engine torque, hydraulic pressure valves, friction elements and other factors. This paper presents a control

...inertia phase usually becomes shorter as the engaging clutch torque increases. However, an extremely small torque capacity can increase the inertia phase, resulting in a large torque disturbance. This is avoided by measuring the interval from the initiation of the

...completion of the inertia phase, this making it possible to distinguish between small and large torque capacity conditions. The torque disturbance resulting from abrupt throttle closing, can cause shock and

...turbine and output shaft. Power-on downshifts when going from a critical condition for clutch slip. This can be avoided from damage in this system by controlling the timing and capacity. DESCRIPTIONS: VEHICLE GEARS; PROCESS OPTIMIZATION; CONTROL OF AUTOMOBILE ENGINES; ANGULAR SPEED; TACHOMETRIC MEASUREMENTS; MEASURING FEELERS; FRICTION CLUTCHES

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